

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
(Case No. 13435US04)

*In the Application of:*

M.C. Afghahi et al.

*U.S. Serial No.:* 10/795,825

*Filed:* March 8, 2004

*For:* SINGLE-EDGED SENSE AMPLIFIER  
WITH SAMPLE-AND-HOLD  
REFERENCE

*Examiner:* Kenneth B. Wells

*Group Art Unit:* 2816

*Conf. No.:* 2778

*Customer No.:* 23446

**CERTIFICATE OF TRANSMISSION**

I hereby certify that this correspondence is being transmitted via EFS-Web to the United States Patent and Trademark Office on August 19, 2011.

/Michael T. Cruz/

Michael T. Cruz

Reg. No. 44,636

**REQUEST FOR A CORRECTED FILING RECEIPT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Applicants respectfully request that the filing receipt for the above-identified case be corrected as follows:

In the section entitled "Domestic Priority data as claimed by applicant," kindly amend as set forth below:

This application is a CON of 10/282,880 10/29/2002 PAT 6,710,628  
which is a CON of 09/776,220 02/02/2001 PAT 6,492,844

Said 09/776,220 claims benefit to and priority from:

~~which claims benefit of~~ 60/215,741 06/29/2000

~~and is a CON of~~ 60/193,607 03/31/2000

~~and is a CON of 60/193,606 03/31/2000~~  
~~and is a CON of 60/179,777 02/02/2000~~  
~~and is a CON of 60/193,605 03/31/2000~~  
~~and is a CON of 60/179,766 02/02/2000~~  
~~and is a CON of 60/220,567 07/25/2000~~  
~~and is a CON of 60/179,866 02/02/2000~~  
~~and is a CON of 60/179,718 02/02/2000~~  
~~and is a CON of 60/179,765 02/02/2000~~  
~~and is a CON of 60/179,768 02/02/2000~~  
~~and is a CON of 60/179,865 02/02/2000~~

A copy of the Official Filing Receipt reflecting proposed changes is attached hereto as well as a copy of the first two (2) pages of the Specification and the first three (3) pages of the Preliminary Amendment previously filed on March 8, 2004 and the first three (3) pages of the Supplemental Preliminary previously filed on July 15, 2004 in the present application.

A corrected filing receipt is respectfully requested.

The Commissioner is hereby authorized to charge any required fees, any fee deficiencies or to credit any overpayments to the deposit account of McAndrews, Held & Malloy, Account No. 13-0017.

Date: August 19, 2011

Respectfully submitted,

/Michael T. Cruz/  
Michael T. Cruz  
Reg. No. 44,636

McANDREWS, HELD & MALLOY, LTD.  
500 West Madison Street, Suite 3400  
Chicago, Illinois 60661

U.S. Application No. 10/795,825, filed March 8, 2004  
Request for Corrected Filing Receipt dated August 19, 2011

Telephone: (312) 775-8084  
Facsimile: (312) 775-8100

**COPY**

UNITED STATES PATENT AND TRADEMARK OFFICE

 UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
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APPL NO.	FILING OR 371 (S) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/795,825	03/08/2004	2816	770	13435US04	22	5	2

CONFIRMATION NO. 2778

CORRECTED FILING RECEIPT



\*0C000000013292394\*

 23446  
 MCANDREWS HELD & MALLOY, LTD  
 500 WEST MADISON STREET  
 SUITE 3400  
 CHICAGO, IL 60661

Date Mailed: 07/21/2004

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

**Applicant(s)**
 Morteza Cyrus Afghahi, Irvine, CA;  
 Esln Terzioglu, Irvine, CA;
**Domestic Priority data as claimed by applicant**

This application is a CON of 10/282,880 10/29/2002 PAT 6,710,628  
 which is a CON of 09/776,220 02/02/2001 PAT 6,492,844 Said 09/776,263 claims benefit to and priority from:  
 which claims benefit of 60/215,741 06/29/2000  
 and is a CON of 60/193,607 03/31/2000  
 and is a CON of 60/193,606 03/31/2000  
 and is a CON of 60/179,777 02/02/2000  
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 and is a CON of 60/179,766 02/02/2000  
 and is a CON of 60/220,567 07/25/2000  
 and is a CON of 60/179,866 02/02/2000  
 and is a CON of 60/179,718 02/02/2000  
 and is a CON of 60/179,785 02/02/2000  
 and is a CON of 60/179,768 02/02/2000  
 and is a CON of 60/179,865 02/02/2000

**Foreign Applications**

If Required, Foreign Filing License Granted: 05/25/2004

**COPY**

Projected Publication Date: 09/02/2004

Non-Publication Request: No

Early Publication Request: No

Title

Single-ended sense amplifier with sample-and-hold reference

Preliminary Class

327

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**LICENSE FOR FOREIGN FILING UNDER  
Title 35, United States Code, Section 184  
Title 37, Code of Federal Regulations, 5.11 & 5.15**

**GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

**NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

# COPY

37362/JFO/B600-BP 1318

EXPRESS MAIL LABEL NO.: EL 848969921 US

DATE: 3/8/04

1

SINGLE-ENDED SENSE AMPLIFIER WITH SAMPLE-AND-HOLD REFERENCE

5 CROSS-REFERENCE TO RELATED APPLICATION(S)

The present application claims the benefit of the filing dates of the following United States Provisional Patent Applications, the contents of all of which are hereby expressly incorporated herein by reference:

10 Serial No. 60/215,741, filed June 29, 2000, and entitled MEMORY MODULE WITH HIERARCHICAL FUNCTIONALITY;

Serial No. 60/193,607, filed March 31, 2000, and entitled MEMORY REDUNDANCY IMPLEMENTATION;

15 Serial No. 60/193,606, filed March 31, 2000, and entitled DIFFUSION REPLICA DELAY CIRCUIT;

Serial No. 60/179,777, filed February 2, 2000, and entitled SPLIT DUMMY BITLINES FOR FAST, LOW POWER MEMORY;

Serial No. 60/193,605, filed March 31, 2000, and entitled A CIRCUIT TECHNIQUE FOR HIGH SPEED LOW POWER DATA TRANSFER BUS;

20 Serial No. 60/179,766, filed February 2, 2000, and entitled FAST DECODER WITH ASYNCHRONOUS RESET;

Serial No. 60/220,567, filed July 25, 2000, and entitled FAST DECODER WITH ROW REDUNDANCY;

25 Serial No. 60/179,866, filed February 2, 2000, and entitled HIGH PRECISION DELAY MEASUREMENT CIRCUIT;

Serial No. 60/179,718, filed February 2, 2000, and entitled LIMITED SWING DRIVER CIRCUIT;

Serial No. 60/179,765, filed February 2, 2000, and entitled SINGLE-ENDED SENSE AMPLIFIER WITH SAMPLE-AND-HOLD REFERENCE;

30 Serial No. 60/179,768, filed February 2, 2000, and entitled SENSE AMPLIFIER WITH OFFSET CANCELLATION AND CHARGE-SHARE LIMITED SWING DRIVERS; and

35 Serial No. 60/179,865, filed February 2, 2000, and entitled MEMORY ARCHITECTURE WITH SINGLE PORT CELL AND DUAL PORT (READ AND WRITE) FUNCTIONALITY.

37362/JFO/B600-BP 1318

1       The following related patent applications, assigned to the  
same assignee hereof and filed on even date herewith in the names  
of the same inventors as the present application, disclose  
5       related subject matter, with the subject of each being  
incorporated by reference herein in its entirety:

Memory Module with Hierarchical Functionality, Attorney  
Docket No. 40050/B600/JFO; High Precision Delay Measurement  
Circuit, Attorney Docket No. 37079/B600/JFO; Single-Ended Sense  
10    Amplifier with Sample-and-Hold Reference, Attorney Docket No.  
37362/B600/JFO; Limited Switch Driver Circuit, Attorney Docket  
No. 37361/B600/JFO; Fast Decoder with Asynchronous Reset with Row  
Redundancy; Attorney Docket No. 37115/B600/JFO; Diffusion Replica  
Delay Circuit, Attorney Docket No. 37360/B600/JFO; Sense  
15    Amplifier with Offset Cancellation and Charge-Share Limited Swing  
Drivers, Attorney Docket No. 37363/B600/JFO; Memory Architecture  
with Single-Port Cell and Dual-Port (Read and Write)  
Functionality, Attorney Docket No. 37364/B600/JFO; Memory  
Redundancy Implementation, Attorney Docket No. 37496/B600/JFO;  
20    and; A Circuit Technique for High Speed Low Power Data Transfer  
Bus, Attorney Docket No. 37497/B600/JFO.

## BACKGROUND OF THE INVENTION

### 1. Field of the Invention

25       The present invention relates to memory devices, in  
particular, semiconductor memory devices, and most particularly,  
scalable, power-efficient semiconductor memory devices.

### 2. Background of the Art

30       Memory structures have become integral parts of modern VLSI  
systems, including digital signal processing systems. Although  
it typically is desirable to incorporate as many memory cells as  
possible into a given area, memory cell density is usually  
constrained by other design factors such as layout efficiency,  
35    performance, power requirements, and noise sensitivity.

# COPY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
(Case No. 13435US04)

Application No.: unassigned

Customer No.: 23,446

Applicants: M.F. Afghahi et al.

Conf. No.: 5923

Filed: herewith

EXPRESS MAIL

For: SINGLE-ENDED SENSE AMPLIFIER  
WITH SAMPLE-AND-HOLD  
REFERENCE

Label No.: EL 848969921 US

Date: March 8, 2004

TC/A.U. 2816

Examiner: K.B. Wells

By: 

John A. Wiberg  
Reg. No. 44,401

**PRELIMINARY AMENDMENT**

MS: PATENT APPLICATION  
Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

Applicants submit this Preliminary Amendment in connection with the above newly filed continuation application. Please amend the application as shown on the following pages.

**Amendments to the Specification** begin on page 2.

**Amendments to the Claims** are reflected in the listing of claims which begins on page 4.

**Remarks** begin on page 5.



# COPY

Appln. No.: Unassigned  
Prelim. Amdt. dated 11/14/03

## Amendments to the Specification:

Please replace the first paragraph of the specification with the following paragraph:

The present application is a continuation of Serial No. 10/282,880, filed October 29, 2002, which is a continuation of Serial No. 09/776,220 filed February 2, 2001, which claims the benefit of the filing dates of the following United States Provisional Patent Applications, the contents of all of which are hereby expressly incorporated herein by reference:

Serial No. 60/215,741, filed June 29, 2000, and entitled MEMORY MODULE WITH HIERARCHICAL FUNCTIONALITY;

Serial No. 60/193,607, filed March 31, 2000, and entitled MEMORY REDUNDANCY IMPLEMENTATION;

Serial No. 60/193,777, filed March 31, 2000, and entitled DIFFUSION REPLICA DELAY CIRCUIT;

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Serial No. 60/220,567, filed July 25, 2000, and entitled FAST DECODER WITH ROW REDUNDANCY;

Serial No. 60/179,866, filed February 2, 2000, and entitled HIGH PRECISION DELAY MEASUREMENT CIRCUIT;

Serial No. 60/179,718, filed February 2, 2000, and entitled LIMITED SWING DRIVER CIRCUIT;

Serial No. 60/179,765, filed February 2, 2000, and entitled SINGLE-ENDED SENSE AMPLIFIER WITH SAMPLE-AND-HOLD REFERENCE;

Appln. No.: Unassigned  
Prelim. Amdt. dated 11/14/03

Serial No. 60/179,768, filed February 2, 2000, and entitled SENSE AMPLIFIER WITH OFFSET CANCELLATION AND CHARGE-SHARE LIMITED SWING DRIVERS; and

Serial No. 60/179,865, filed February 2, 2000, and entitled MEMORY ARCHITECTURE WITH SINGLE PORT CELL AND DUAL PORT (READ AND WRITE) FUNCTIONALITY.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
(Case No. 13435US04)

Application No.: 10/795,825  
Applicants: M.F. Afghahi et al.  
Filed: March 8, 2004  
For: SINGLE-ENDED SENSE AMPLIFIER  
WITH SAMPLE-AND-HOLD  
REFERENCE  
TC/A.U. 2816  
Examiner: K.B. Wells

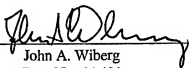
Customer No.: 23,446

Conf. No.: 2778

EXPRESS MAIL

Label No.: EV 435259525 US

Date: 7/15/04

By:   
John A. Wiberg  
Reg. No. 44,401

**SUPPLEMENT PRELIMINARY AMENDMENT**

MS: PATENT APPLICATION  
Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

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